

1            **ABSTRACT**

2            An extensible editor allows integration of extensions that modify the  
3 editor's default behavior and provide customized feedback to users. The editor  
4 includes an event routing model that works to decrease the occurrence of conflicts  
5 between the editor and extensions and between extensions. Upon the occurrence  
6 of an event, the editor routes the event to each extension before the editor's default  
7 handling of the event occurs. When an extension responds to an event, the  
8 extension may "consume" the event by indicating to the editor not to allow further  
9 processing of the event. After an event has been pre-processed by each extension,  
10 the default editor acts on the event. The editor then routes the event to each  
11 extension again, to allow each extension to process the event after the default  
12 editor has acted. When the post-processing is completed, each extension is  
13 notified of the actions taken by the editor and by each of the other extensions.

14            The editor includes interfaces through which extensions are connected to  
15 the editor and through which selection services and highlight rendering services  
16 are provided. The selection services interfaces provide a clear separation of a  
17 logical selection position in the document and the visual feedback provided for the  
18 selection, allowing extensions to be designed that provide customized selection  
19 feedback. The highlight rendering services interfaces provide an extension with  
20 the ability to augment an existing selection without modifying the actual  
21 document.